What is claimed is:

1   1.   A method for allocating computer resources for use by a program, comprising the

2   steps of:

3   allocating a first resource; and

4   allocating a second resource having a shortest distance to the first resource;

5   wherein the distance between the resources is stored as firmware portable

6   to various operating systems running the program.

1   2.   The method of claim 1 where in the distance between the resources is selected

2   from a group consisting of:

3   a distance measured from one resource to another resource and

4   a distance measured relative to a distance used as a reference.

1   3.   The method of claim 2 wherein the distance between the resources is measured in

2   time units.

1   4.   The method of claim 1 wherein the distance between the resources is provided to

2   an operating system running the program upon power-up of a system running the

3   operating system.

1   5.   The method of claim 1 wherein the distance between the resources is measured by

2   the distance between nodes containing the resources.

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1 6. The method of claim 1 wherein the distance between the resources is provided by

2 the time taken to communicate from one resource to another resource or the time

3 taken to transfer data from one resource to another resource.

1 7. The method of claim 1 wherein the resources reside in a plurality of nodes each of

2 which includes at least one resource being either an I/O device, a memory device,

3 or a processor.

1 8. The method of claim 7 wherein resources in a node are on a same bus or share a

2 point-to-point link.

1 9. The method of claim 1 wherein the first resource is an input device associated

2 with a storage device storing the program or storing data associated with the

3 program.

1 10. The method of claim 1 further comprising the step of allocating a third resource

2 having a shortest distance to either the first resource or the second resource .

1   11.   A system having computer resources for use by a program, comprising:

2   means for allocating a first resource; and

3   means for allocating a second resource having a shortest distance to the

4   first resource;

5   wherein the distance between the resources is stored as firmware portable

6   to various operating systems running the program.

1   12.   The system of claim 11 wherein the distance between the resources is selected

2   from a group consisting of:

3   a distance measured from one resource to another resource, and

4   a distance measured relative to a distance used as a reference.

1   13.   The system of claim 11 wherein the distance between the resources is measured by

2   the distance between nodes containing the resources.

1   14   The system of claim 11 wherein the distance between the resources is measured in

2   time units.

1   15.   The system of claim 14 wherein the measured time units are provided by the time

2   taken to communicate from one resource to another resource or the time taken to

3   transfer data from one resource to another resource.

1   16.   The system of claim 11 wherein the resources reside in a plurality of nodes each of

2   which includes at least one resource being either an I/O device, a memory device,

3   or a processor.

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1 17. The system of claim 16 wherein resources in a node are on a same bus or share a

2   point-to-point link.

1 18   The system of claim 11 further comprising means for providing the distance

2   between the resources to an operating system upon power-up of the system.

1 19. The system of claim 11 further comprising means for allocating a third resource

2   having a shortest distance to either the first resource or the second resource.

1 20. A computer-readable medium embodying instructions that perform a method for

2   allocating computer resources for use by a program, the method comprising the

3   steps of:

4   allocating a first resource; and

5   allocating a second resource having a shortest distance to the first resource;

6   wherein the distance between the resources is stored as firmware portable

7   to various operating systems running the program.

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